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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/787,527	02/26/2004	Isaac Samuel		6452

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Docket Administrator (Room 3J-219)
Lucent Technologies Inc.
101 Crawfords Corner Road
Holmdel, NJ 07733-3030

EXAMINER

HANNIF ALI, LARRY

ART UNIT	PAPER NUMBER
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2688

DATE MAILED: 11/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/787,527	Applicant(s) SAMUEL, ISAAC	
	Examiner Larry Hannif-Ali	Art Unit 2688	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02-26-04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date: _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1, 3, 9, 10, 11,12, and 13** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hughes (U.S. Patent No. 6718170 B) in view of Attar (U.S. Pub. No. 2005/0124369 A1).

Regarding **Claim 1**, Hughes teaches a wireless telecommunications device comprising a processor configured to handle call traffic and to record measurement data, the processor being configured to detect processor load and to automatically adjust the rate of recordal of measurements dependent on detected processor load so as to keep the processor load within predetermined limits [Col. 4, lines 66-67 & Col. 5, lines 1-3 & Col. 7, lines 36-55 (inherently, the search rate is recorded and kept between the higher upper limit HUL and the lower upper limit LUL which varies with the level of loading of the microprocessor)]. However, Hughes fails to specifically teach the processor located at a network node. The examiner maintains that the claimed limitation was well known in the art as taught by Attar.

In the same field of endeavor, Attar discloses a system for overload detection in a wireless network where the wireless telecommunication network comprises a processor [paragraph 0048].

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, the processor of Hughes located at the network of

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Attar in order to have a system capable of detecting processor load and dynamically adjusting the rate of recordal to keep the load within predetermined limits.

Regarding **Claim 3**. The combination of Hughes and Attar further teaches a wireless telecommunications network node which on start up the processor load is allowed to increase to beyond a first threshold whereupon the rate of recordal of measurements is reduced in successive steps until the processor load falls below a second threshold whereupon the rate of recordal of measurements is increased in successive steps, the first threshold being higher than the second threshold [Hughes: Col. 5, lines 17-22 (if the microprocessor is not overloaded the search rate is allowed to increase and if the microprocessor becomes overloaded, the search rate is decreased)].

Regarding **Claim 9**. The combination of Hughes and Attar further teaches the wireless telecommunications network node is a controller configured to control at least one base station for wireless telecommunications to mobile user terminals [Attar: paragraph 0014 & paragraph 0048]

Regarding **Claim 10**. The combination of Hughes and Attar further teaches the wireless telecommunications network node is a radio network controller [Attar: paragraph 0048 (base station controller)].

Regarding **Claim 11**. The combination of Hughes and Attar further teaches a wireless telecommunications network node which is a radio network controller of a Universal Mobile Telecommunications System (UMTS) wireless telecommunications network [Attar: paragraph 0048 & paragraph 0027 (it is well known in the art that CDMA is the wireless technology used with UMTS)].

Regarding **Claim 12**. Hughes teaches a processor configured to handle call traffic and to record measurement data, the processor being configured to detect processor load and to automatically adjust the rate of recordal of measurements dependent on

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detected processor load so as to keep the processor load within predetermined limits [Col. 4, lines 66-67 & Col. 5, lines 1-3 & Col. 7, lines 36-55 (inherently, the search rate is recorded and kept between the higher upper limit HUL and the lower upper limit LUL which varies with the level of loading of the microprocessor)]. However, Hughes fails to specifically teach the processor in a wireless telecommunications network comprising operations and maintenance centre, a radio network controller, and a plurality of base stations under the control of the radio network controller and configured for wireless telecommunications with mobile user terminals, the radio network controller.

The examiner maintains that the claimed limitation was well known in the art as taught by Attar.

In the same field of endeavor, Attar discloses a wireless communication network comprising an operations and maintenance centre, a radio network controller, and a plurality of base stations under the control of the radio network controller and configured for wireless telecommunications with mobile user terminals, the radio network controller comprising a processor [paragraph 0028 (inherently, an operations and maintenance center exists in every wireless network monitoring the network) & Fig. 1 & paragraph 0048 (processor may be located at the base station controller)].

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, the processor of Hughes with the wireless telecommunications network as taught by Attar, in order to have a system capable of detecting processor load and dynamically adjusting the rate of recordal to keep the load within predetermined limits.

Regarding **Claim 13**. Hughes teaches a method of controlling processor load in wireless telecommunications device comprising a processor, the processor handling call traffic and recording the measurement data, the processor detecting processor load and automatically adjusting the rate of recordal of measurement data dependent on detected processor load so as to keep the processor load within predetermined limits. [Col. 4, lines 66-67 & Col. 5, lines 1-3 & Col. 7, lines 36-55 (inherently, the search rate is recorded and kept between the higher upper limit HUL and the lower upper limit LUL

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which varies with the level of loading of the microprocessor)). However, Hughes fails to specifically teach the processor located at a network node. The examiner maintains that the claimed limitation was well known in the art as taught by Attar.

In the same field of endeavor, Attar discloses a system for overload detection in a wireless network where the wireless telecommunication network comprises a processor [paragraph 0048].

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, the processor of Hughes located at the network of Attar in order to have a system capable of detecting processor load and dynamically adjusting the rate of recordal to keep the load within predetermined limits.

3. **Claim 2** is rejected under 35 U.S.C. 103(a) as being unpatentable over Hughes (U.S. Patent No. 6718170 B) in view of Attar (U.S. Pub. No. 2005/0124369 A1) and further in view of Cantrell (U.S. Pub. No. 2004/0030776 A1).

Regarding **Claim 2**. The combination of Hughes and Attar teaches everything as applied above in Claim 1 including the processor comprising a processor load detector (inherently, there must be a load detector present in the processor, if it is to detect overloading conditions). However, the combination fails to specifically teach a variable filter, the filter acting to discard a proportion of measurement reports received, the proportion being adjusted dependent upon the processor load. The examiner maintains that the claimed limitation was well known in the art as taught by Cantrell.

In the same field of endeavor, Cantrell discloses a multi-level packet screening system with dynamically selected filtering criteria, including a variable filter, the filter acting to discard a proportion of measurement reports received, the proportion being adjusted dependent upon the processor load [paragraph 0009 & paragraph 0033, lines 1-11 & Fig. 1, Items 14 and 26].

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, within the system of Hughes and Attar, the filtering criteria as taught by Cantrell in order to have a system with at least two filters to handle

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overloading conditions.

4. **Claims 4, 5, 6, and 7** is rejected under 35 U.S.C. 103(a) as being unpatentable over Hughes (U.S. Patent No. 6718170 B) in view of Attar (U.S. Pub. No. 2005/0124369 A1) and further in view of Tellado (U.S. Pub. No. 2004/0052228 A1).

Regarding **Claim 4**. The combination of Hughes and Attar teaches everything as applied above in Claim 1. However, the combination fails to specifically teach the wireless telecommunications network node in which the processor comprises a statistics collector, the statistics controller acting to selectively adjust dependent on detected processor load which of a variety of possible statistics are collected, the statistics being collected from analysis of the measurement records. The examiner maintains that the claimed limitation was well known in the art as taught by Tellado.

In the same field of endeavor, Tellado discloses a method and system for synchronizing a receiver including the processor comprising a statistics collector, the statistics controller acting to selectively adjust dependent on detected processor load which of a variety of possible statistics are collected, the statistics being collected from analysis of the measurement records [paragraph 0059 & paragraph 0055 (inherently, the statistics controller will adjust dependent on the processor load which statistics are collected)].

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, within the system of Hughes and Attar, the statistics processor as taught by Tellado, in order to have a system capable of synchronizing the associated transceiver.

Regarding **Claim 5**. The combination of Hughes, Attar, and Tellado further teaches the number of statistics collected is increased upon the processor load going below a first threshold and the number of statistics collected is reduced upon the processor load going above a second threshold, the second threshold being higher than the first threshold [Hughes: Col. 5, lines 17-22 (when the processor is not overloaded, the

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search rate is increases and hence more statistics are collected and when the processor is overloaded the search rate is decreased and hence less statistics are recorded)).

Regarding **Claim 6**. The combination of Hughes and Attar teaches everything as applied above in Claim 1. However, the combination fails to specifically teach which the measurement records are event records each comprising an indication of an event experienced by a mobile user terminal and measurements of radio conditions experienced by the mobile user terminal. The examiner maintains that the claimed limitation was well known in the art as taught by Tellado.

In the same field of endeavor, Tellado discloses a method and system for synchronizing a receiver in which the measurement records are event records each comprising an indication of an event experienced by a mobile user terminal and measurements of radio conditions experienced by the mobile user terminal [paragraph 0055].

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, within the system of Hughes and Attar, the measurement of radio conditions as taught by Tellado, in order to have a system capable of synchronizing the associated transceiver.

Regarding **Claim 7**. The combination of Hughes, Attar, and Tellado further teaches the measurement records also comprise data of geographical location of the mobile user terminal [paragraph 0042 (it is well known in the art that location can be calculated from the parameters of time of arrival, frequency, Doppler spread etc)].

5. **Claim 8** is rejected under 35 U.S.C. 103(a) as being unpatentable over Hughes (U.S. Patent No. 6718170 B) in view of Attar (U.S. Pub. No. 2005/0124369 A1) and further in view of Hoffpauir (Reg. No. H1895).

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Regarding **Claim 8**. The combination of Hughes and Attar teaches everything as applied above in Claim 1. However, the combination fails to specifically teach the wireless telecommunications network node comprising an outlet port for transfer of measurement records to a remote network node. The examiner maintains that the claimed limitation was well known in the art as taught by Hoffpaur.

In the same field of endeavor, Hoffpaur discloses an interface module including a wireless telecommunications network node comprising an outlet port for transfer of measurement records to a remote network node [Col. 19, lines 49-65].

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made to use, within the system of Hughes and Attar, the interface module as taught by Hoffpaur in order to have a system capable of integrating a number of telecommunications lines.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Larry Hannif-Ali whose telephone number is 571-272-5598. The examiner can normally be reached on Mon-Fri 9:00AM - 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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Larry Hannif-Ali

November 1, 2005


GEORGE ENG
PRIMARY EXAMINER